

10/668,056
REMARKS

Claims 1-10 are rejected as being unpatentable over Paritsky et al. in view of Zuckerman et al. Claims 12-30 are rejected as being anticipated by Komachiya. Reconsideration is respectfully requested in view of the attached amended claims and following considerations.

Claim 1 has been amended to include the limitations of Claim 6 and Claim 6 has been cancelled. Neither Paritsky nor Zuckerman disclose the thin film on the concave curved surface, the thin film having a coefficient of reflectivity that decreases with increasing temperature. Therefore, Claims 1 and Claims 2-5 and 7-10 are believed allowable.

With respect to applicant's independent Claims 12 and 14, Komachiya makes no disclosure of fuel injectors or fuel injectors having a fuel chamber therein as called for in applicant's claims. The fiber optic sensors of Komachiya are directed to a variety of other engine parts completely unrelated to fuel injectors. Therefore, Claims 12 and 14 are believed to distinguish over Komachiya and therefore be allowable along with Claims 13, 15, 16, 19, 20 and 21 dependent thereon.

With respect to applicant's independent Claim 17, the claim calls for a fuel injector with a fuel chamber therein and a fiber optic fuel pressure sensor and a fiber optic combustion pressure sensor in a channel in the injector. Komachiya does not disclose any form of fuel injector having dual fiber optic pressure sensors, one for fuel pressure and the

other for combustion chamber pressure. Therefore, Claim 17 is believed to distinguish over Komachiya and be allowable along with Claim 18 dependent thereon.

Likewise, with respect to applicant's Claim 22, the same features with respect to the fuel injector are not disclosed in Komachiya and, in addition, Komachiya does not disclose the dual pairs of optical fibers, the tip of one pair being spaced from the diaphragm at a distance different from the other pair. Thus, Claim 22 distinguishes over Komachiya and therefore is allowable along with Claims 23-30 inclusive dependent on Claim 22.

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With respect to applicant's independent Claim 17, the claim calls for a fuel injector with a fuel chamber therein and a fiber optic fuel pressure sensor and a fiber optic combustion pressure sensor in a channel in the injector. Komachiya does not disclose any form of fuel injector having dual fiber optic pressure sensors, one for fuel pressure and the

other for combustion chamber pressure. Therefore, Claim 17 is believed to distinguish over Komachiya and be allowable along with Claim 18 dependent thereon.

Likewise, with respect to applicant's Claim 22, the same features with respect to the fuel injector are not disclosed in Komachiya and, in addition, Komachiya does not disclose the dual pairs of optical fibers, the tip of one pair being spaced from the diaphragm at a distance different from the other pair. Thus, Claim 22 distinguishes over Komachiya and therefore is allowable along with Claims 23-30 inclusive dependent on Claim 22.